

Patent Abstracts of Japan

PUBLICATION NUMBER : 10302289
PUBLICATION DATE : 13-11-98

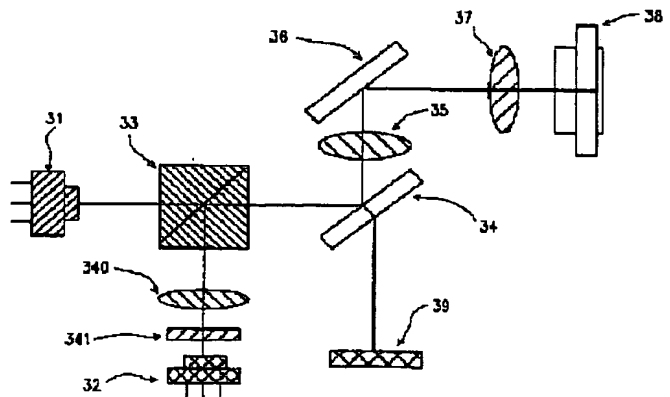
APPLICATION DATE : 23-10-97
APPLICATION NUMBER : 09291036

APPLICANT : IND TECHNOL RES INST;

INVENTOR : YO SOMEI;

INT.CL. : G11B 7/125

TITLE : DOUBLE-WAVELENGTH LASER
PICKUP HEAD



ABSTRACT : PROBLEM TO BE SOLVED: To make an apparatus simple and light-weight and obtain a good frequency distribution, by providing a double-wavelength laser pickup head having two laser diodes of different wavelengths, and using a laser optical path of a shorter wavelength when data are read out from a DVD apparatus and a laser optical path of a longer wavelength when data are read out from a CD or CD-R.

SOLUTION: Light beams from two laser diodes 31, 32 reach an optical disk 38 through a polarization beam splitter 33, a beam splitter 34, a collimator 35, a reflecting mirror 36 and an objective lens 37. The light beams are reflected by the optical disk 38 to pass the objective lens 37, reflecting mirror 36, collimator 35 and beam splitter 34 in an opposite direction to reach a phase detector 39. The objective lens 37 is set to read a DVD. When light beams of a longer wavelength are projected to read a CD or CD-R, a spherical aberration is caused. Therefore, a correction lens 340 is added, which simplifies the constitution.

COPYRIGHT: (C)1998,JPO